

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~An apparatus A message broker~~ for managing subscription requests in a multicast messaging system comprising a plurality of publishers publishing information to a ~~[[the]]~~ broker and a plurality of subscribers subscribing to information received from one or more publishers, the ~~apparatus broker~~ comprising:

~~means for~~ a computer, wherein the computer comprises:

a matching engine, wherein the matching engine receives ~~receiving~~ a subscription request pointing to topic information in which a ~~[[the]]~~ requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy, ~~means for parsing~~ parses the ~~[[said]]~~ subscription request to determine if ~~the~~ ~~[[said]]~~ request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard, locates a node in the topic tree defined by the prefix, wherein the node represents a topic immediately preceding the wildcard, and ~~means, responsive to determining that the~~ ~~[[said]]~~ request ~~does include a wildcard, for instructions~~ instructs the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes ~~the~~ ~~[[said]]~~ wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix.

2. (Currently Amended) The ~~apparatus~~ ~~[[message broker]]~~ of claim 1 comprising:

~~means for assigning the multicast address to~~ the topic in the topic hierarchy which precedes the wildcard ~~said preceding topic.~~

3. (Currently Amended) The ~~apparatus~~ ~~[[message broker]]~~ of claim 2, wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard ~~[[preceding topic]]~~ is inherited from parent topic information

4. (Currently Amended) A computer implemented method for managing subscription requests in a multicast messaging system, the messaging system comprising a plurality of publishers publishing information to a broker and a plurality of subscribers subscribing to information received from one or more publishers, the method comprising the steps of:

receiving a subscription request pointing to topic information in which a [[the]] requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

parsing the subscription [[said]] request to determine if the [[said]] request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard; and

locating a node in the topic tree defined by the prefix, wherein the node represents a topic immediately preceding the wildcard; and

~~responsive to determining that said request does include a wildcard, for~~ instructing the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the [[said]] wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix.

5. (Currently Amended) The computer implemented method of claim 4 comprising:

assigning the multicast address to the topic in the topic hierarchy which precedes the wildcard ~~said preceding topic.~~

6. (Currently Amended) The computer implemented method of claim 5 wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard ~~preceding topic~~ is inherited from parent topic information.

7. (Currently Amended) A computer program embedded on a computer readable medium comprising program code adapted to perform, [[for]] managing subscription requests in a multicast messaging system when said program code is run on a computer, the messaging system comprising a plurality of publishers publishing information to a broker and a plurality of subscribers subscribing to information received from one or more publishers, the computer program comprising program code ~~means adapted to perform, when said program is run on a computer~~, the steps of:

receiving a subscription request pointing to topic information in which a [[the]] requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

parsing the subscription [[said]] request to determine if the [[said]] request includes a wildcard, wherein a topic string received as the subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard;

locating a node in the topic tree defined by the prefix, wherein the node represents a topic immediately preceding the wildcard; and

~~responsive to determining that said request does include a wildcard,~~ for instructing the requesting subscriber to listen on a multicast address associated with the topic in the topic hierarchy which precedes the the [[said]] wildcard by associating the subscriber with the node in the topic tree, wherein the node is defined by the prefix .

8. (Currently Amended) The computer program of claim 7, wherein the program code means is also adapted to perform the following step when said program is run on a computer:

assigning the multicast address to the topic in the topic hierarchy which precedes the wildcard ~~said preceding topic.~~

9. (Currently Amended) The computer program of claim 8, wherein the multicast address for the topic in the topic hierarchy which precedes the wildcard ~~preceding topic~~ is inherited from parent topic information.

10. (Currently Amended) A data processing system for managing a multicast messaging system for managing subscription requests, the data processing system comprising:

a bus;

a memory connected to the bus, wherein the memory includes computer program code;

and

a processor coupled to the bus, wherein the processor executes the computer program code to a message broker; a plurality of publishers publishing information to the message broker;

a plurality of subscribers subscribing to information received from one or more publishers, the subscribers comprising:

~~means for registering subscription requests with the broker,~~ the message broker, the message broker comprising:

a matching engine, wherein the matching engine receives ~~means for receiving~~ a subscription request pointing to topic information in which a [[the]] requesting subscriber is interested, the topic information defining a specific topic within a topic hierarchy;

a parser, wherein the parser parses ~~means for parsing the~~ [[said]] subscription request to determine if the [[said]] request includes a wildcard, wherein a topic string received as the [[said]] subscription request is parsed into a prefix and a remainder, wherein the prefix comprises everything in the topic string preceding the wildcard and, wherein the parser locates a node in the topic tree defined in the prefix, wherein the node represents a topic immediately preceding the wildcard; and

~~means, responsive to determining that said request does include a wildcard, an~~
instructor, wherein the instructor instructs the requesting subscriber to listen on a
multicast address associated with the topic in the topic hierarchy which precedes the
[[said]] wildcard by associating the subscriber with the node in the topic tree, wherein the
node is defined by the prefix.